Life History of the Butterfly *Hesperilla mastersi* (Master's Skipper)

By E. O. Edwards

In 1900 Dr. G. A. Waterhouse first named this butterfly, but for 60 years details of the life history remained unrecorded. In March 1960 Mr. T. H. Guthrie found the butterfly flying high around trees near Whale Beach, 25 miles north of Sydney. Varieties of Sword Grass *(Gahnia)* are frequently the foodplants of the larvae of the genus *Hesperilla* and this was suspected as being the foodplant of the larvae of this butterfly. Mr. Guthrie found that a Sword Grass *(Gahnia melanocarpum)* was growing in the vicinity, but exposed plants revealed no signs of larvae or pupae. A Hesperid egg however was found on the upper side of an old leaf near the base of a plant of *G. melanocarpum,* in deep shade among bushes. This proved to be the egg of *H. mastersi.* Subsequent investigation revealed that this species only breeds on plants growing in thick undergrowth, which possibly accounts for the difficulty of finding the larvae.

Up till 1933 less than 20 specimens were known from Gosford, Katoomba and Moruya in N.S.W. (Waterhouse, 1932). Since then specimens have been collected from Port Macquarie and Whale Beach in N.S.W. and Marracoota (Vic.) by Crosby (1951).

LIFE HISTORY.

(Taken from notes by Mr. Guthrie and larvae sent to me.)

Egg. Typically hesperid; hemispherical with about 24 radial ridges. Size: 1.2 mm. in diameter, 0.9 mm. high.

Larva. Quite distinctive, especially in the early stages, due to a half moon shaped mark on the rear segments and bright red on the first thoracic segment.

Newly hatched larva is long and cylindrical; very pale lemon yellow with the 1st thoracic segment bright red; no mid-dorsal line, but a lateral line of deeper lemon colour; a half moon shaped marking boarded with black on the anal segment with eight very long hairs protruding from the tail; the body is otherwise smooth. Head is dark shining brown with minute dimples and a depression at the centre of the dorsal apex (that is, behind the top of the head).

Full grown larva: Head brown-yellow or mid-brown marked with brown black. The two areas of colour rather sharply divided. Body, green-yellow with a lateral white stripe and two dorsal white stripes.

The segment behind the head is yellow and the anal segment orange. Beneath the larva is yellow.

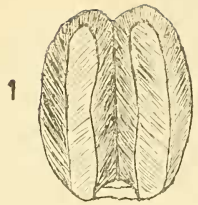
The larvae live in shelters made by drawing the leaves of the food-plant together.

Pupa: Dark brown with a distinctive pupal cap of shining dark brown with low raised, somewhat rounded, area of black, but not high level platforms like pupal caps of *H. donnysa.* They pupate in the shelter made by the larva.

As the books in which a description of this butterfly is given have been out of print for many years, a brief description of the butterfly is given. Male above: forewing, brown-black suffused with orange brown; large cell spot; 3 subapical spots; discal spot in area 3 all pale orange hyaline; narrow discal sex mark from dorsum to vein 4. black, broad central orange band.

Beneath: forewing red-brown; spots as above; extra pale orange hyaline spots in area 1a and 2; series of cream apical spots.

Female similar to male but spots in forewing larger and wings more convex.



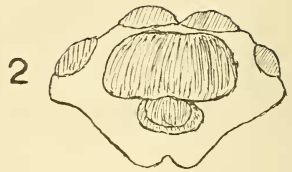


Fig. 1. Larval head of *H. mastersi*. Dark shaded portion very dark brown. Lightly shaded portion mid-brown.

Fig. 2. Pupal cap of *H. mastersi*. Shaded portion dark shining black with a few dark hairs. Plain portion dark shining brown and relatively smooth.

REFERENCES

Waterhouse, G. A., 1932. "What Butterfly is That?" Sydney.

Crosby, D. F., 1951. Notes on some Eastern Victorian Butterflies with a new Victorian Record. *Vic. Nat.* 68: 97-101.